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ARKANSAS ADVANCED
ENERGY ASSOCIATION

CONSUMER GUIDE TO SOLAR ELECTRICITY



**FOR ARKANSAS
HOMEOWNERS**

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INTRODUCTION

Adding renewable energy systems to meet your home or business's energy requirements may help reduce your electric bill, contribute to saving the environment, and even increase the value of your property.

During the past decade, deployment of renewable energy systems in the United States (U.S.) has grown rapidly. Cost reductions as well as new home-ownership and financing options have made renewable energy a possibility for many Arkansas Residents.

Adding a renewable energy system to your property is a big decision. Understanding the basics of renewable energy, financing options, how it might impact your electric bill, and which questions to ask the experts are important.

This guide is meant to provide guidance and initial suggestions only. It does not provide legal advice or legal opinions nor replace the benefit of legal consultation with a private attorney or other expert.

Special thanks to the Arkansas Net Metering Working Group and participants for their input.

Net Metering in Arkansas

During 2020, the Arkansas Public Service (Commission) amended the Net Metering Rules. The new rules apply to all Arkansas customers.

The rules authorize homeowners and businesses with renewable energy systems to meet their energy requirements. Pursuant to the Rules and the utilities' interconnection process, the utility will accept the excess power and will give the customer a bill credit based on the applicable rate of the customer's energy bill, multiplied by the number of kilowatt hours fed back to the grid.

For residential applications, renewable energy systems are limited to 25 kW in size, or one hundred percent (100%) of the customer's highest monthly bill in the previous year.

If you produce more electricity than you need at any point in time, the excess energy can be fed back to the grid. Excess kilowatt hours generated will be banked with the electric company and applied to future bills.



Tax Incentives and Information

30% federal tax credit available for purchased renewable energy systems installed by December 31, 2023. Remember, a company which leases you a Renewable Energy System, will typically be assigned any available tax credits. The federal investment tax credit is credited against taxes owed.

Understand any potential tax implications of credits or incentives. Remember, only a CPA or tax attorney can give tax advice, and only an attorney can give legal advice. When consulting such professionals about your situation, seek those that have experience with renewable energy system installations.

Financing

As with any major decision for your home or business, it is wise to understand your finances when shopping for a Renewable Energy System. Although sunlight and wind are free, buying or leasing Renewable Energy Systems is not, and making sure that you are dealing with a qualified company is very important.

Renewable Energy System ownership options are similar to ownership options for cars. It is important to understand the differences between them so that you can choose the option that best fits your needs.



PURCHASING THE SYSTEM:

When you buy the Renewable Energy System directly, you are the owner, and you benefit from available incentives and receive all of the electricity the system produces. You are usually responsible for system upkeep, although some providers offer maintenance service plans on purchased systems. You may also be the beneficiary of any tax credits or other incentives that promote renewable energy. *You have the right to retain any Renewable Energy Credit (REC) created as a result of the electricity supplied by your renewable energy system. You are not required to transfer any RECs that you own to the utility or a third party renewable energy system developer. (Arkansas Public Service Commission Docket No. 16-027-R, Order No. 28, p. 556).

The payback period is the amount of time it will take for your system to pay for itself in energy cost savings. Payback is calculated based on expectations of future energy bills, the cost of your system, and any available incentives. These factors will vary among systems.

LEASING THE SYSTEM:

Under a long-term lease, the renewable energy company owns the system but leases it to you for your use and benefit. Under a lease, the company is typically responsible for upkeep and maintenance and is the beneficiary of any eligible tax credits or other incentives. You make fixed monthly payments to the company as agreed upon in the lease. Some companies may allow you to lease with no initial costs (“no money down”). Some companies also give you an option to purchase the system after a certain amount of time. It is important to read the lease terms carefully to be certain that you can meet them, also compare the lease terms to those of a purchase loan before making a final decision. As with purchasing, you may also want to contact an attorney and/or CPA to understand the lease provisions and how the lease might affect future plans, such as selling your home or business during the lease term.

GET THE BEST DEAL

Make sure to get multiple bids for your Renewable Energy System. Many Arkansans will find the market quite competitive with multiple companies competing for your business. Use this guide along with other available resources, and compare the costs and terms from different qualified and reputable firms.

KEY QUESTIONS TO ASK BEFORE ENTERING INTO AN AGREEMENT



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For all systems:

What value (e.g., \$0.085) are you assigning to the kilowatt hours my Renewable System will generate? In other words, what is my electric company's average retail rate less fixed charges?

What average inflation rate are you assigning to my electric company's rates and what timeframe is being considered for this average inflation rate?

Do you have experience installing grid-connected renewable energy systems, and how many years of experience do you have installing Renewable Energy Systems?

What is the total cost of the Renewable Energy System?

What discount rate is being used to determine the payback?

What is your timeline for this investment? Do you want a short-term arrangement or a long-term asset?

How much do I pay up front or over time and for how long? What is the interest rate for the loan if I finance the system? Are there any pre-payment or other penalties for paying the loan off early?

What is the anticipated system size that is appropriate for my needs?

Will I get access to an online production monitoring system?

How much electricity will the system generate each year? Do you guarantee a minimum amount?

Do system production calculations include actual installation details of the system such as shading in my yard and other location aspects?

Can I expect to save money with the system? If so, how much and based on what assumptions?

Is the installation company licensed and insured in Arkansas?

What will the system look like once installed? Will I receive a system design for my review and approval before installation?

Will I be required to make any changes to my home (e.g., roofing upgrades)?

Are there separate warranties for parts and labor? Will installing a renewable energy system affect my other existing warranties?

What do the warranties cover and what are their durations?

What type of maintenance or cleaning is required? Are any maintenance services included?

What impact will the installation have on my property insurance policy? Will my premium be affected?

Should I purchase liability insurance in the event my net metering facility causes harm to someone and/or their property?

Whom should I contact if I have a question about the system following the installation?

What are the rules in Arkansas regarding Homeowner's Associations (HOAs)? In some states, laws prevent HOAs from restricting the right to install a renewable energy system.

KEY QUESTIONS TO ASK BEFORE ENTERING INTO AN AGREEMENT



For leases only:

How long is the lease?

Will my payments increase over time? How does the rate of increase compare to historic utility rate increases?

What happens if I wish to end the lease early?

Can I purchase the system, either during the agreement or once it ends? What are my options when I sell my home?

Am I free to sell my home to anyone, or do I need the Renewable Energy System owner's permission to assign the lease to the buyer?

Are there fees to transfer the lease agreement to the new homeowners?

Do I have to pay off the lease when my home is sold?

If I want to sell my home and don't own the system, how can I describe my home to potential buyers?

Who is responsible for repairs and maintenance on the system?

Who is responsible for insuring the system, and what happens if the system damages my roof or property?

Do Renewable Energy Certificates (RECs) apply to my transaction? If so, can you explain how RECs work in my situation?

THINGS TO KEEP IN MIND



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The renewable energy vendor you choose can have a substantial impact on the success of your installation. Ask for references of renewable energy system installations in your area, and call those references to learn about their experiences. Ask the renewable energy vendor for proof of licensure and insurance (e.g., liability, workman's compensation). Consumers should also check with other consumer guides to determine if the renewable energy company is the right fit for



Know your weather. It is important to note that the weather plays a major role in whether or not your renewable energy system will be beneficial for you, and which system is best suited for your needs.

RENEWABLE ENERGY VENDOR VS. THE UTILITY CO

The renewable energy vendor is not the same as the utility company. When purchasing a renewable energy system, it is important to understand that the installer of a renewable energy system is not a representative of your utility company and should not represent themselves as such. Contact your utility company to discuss the pricing and payback information being used by the renewable system vendor to ensure you are receiving the most current information.

POTENTIAL FEES

You may be responsible for certain fees, such as an application fee in some cases or fees for a study (typically only required when the customer is considering a larger system).

Ensure that all equipment has been appropriately installed & that all electrical connections have been made in accordance with applicable codes.

How much electricity does your home or business use each month? Decide how much you want to rely on renewable energy. Your utility bill will show your electricity usage in kilowatt-hours (kWh) and the amount you pay for that electricity.



Calculate your expected energy usage in the future. Discuss your usage with the renewable energy companies you interview to better understand savings potential & to help get a system sized for your specific needs. You should also discuss your electricity usage with your electric utility provider to ensure your understanding of your usage and how an installation of a renewable energy system will impact your usage.



INSTALLER RESPONSIBILITIES Prior to the start of the installation, understand and document what the installer's role will be in completing, submitting, and negotiating the Interconnection Application, requests, and associated agreement. Some installers take care of all the paperwork and others do not. Verify who will request the utility to conduct the test of the Renewable Energy Installation.

Know your responsibilities. As the customer, it is important to understand the steps for completing and submitting the Preliminary Site Review Request and Interconnection Agreement and requesting interconnection of your Renewable Energy System to your utility's electrical distribution grid. Contact your electric provider directly to obtain information specific to your provider's interconnection process.

SAFETY ISSUES. Ask the installer about safety issues related to the Renewable System; especially ask about fire safety and other hazards. Many building codes now include provisions intended to address firefighter safety, such as minimum setback areas to provide space around Renewable Systems, as well as specific equipment requirements. There may also be local electrical and/or construction permitting requirements; so check whether the renewable energy company has experience in your area and knows the local rules before the system is installed.

Understand the terms. Contracts are legally binding and should be read carefully. Be certain that you understand what you are receiving from the renewable energy installer and how much you are paying for it, as well as any additional requirements not covered in the contract. Remember to verify that any terms and conditions, that are important to you, are specifically included in the official signed contract documents before you sign. The following contract terms should be clearly identified:

- o Terms for terminating the contract if Net Metering Saturation Levels result in additional costs or denial of a request to interconnect.
- o NM FACILITY ownership.
- o Rights to federal tax or other available credits.
- o Ownership of and Renewable Energy Credits (RECs).
- o Estimated start and completion dates.
- o Descriptions of the duration, nature, and potential impacts to the buyer of any restrictions, liens, fixture filings, or other security interests that may encumber the CUSTOMER's ability to transfer or modify his property or gain access to credit.
- o Termination or assignment of contract rights.
- o Performance bonding security regarding property damage to the CUSTOMER.
- o All costs and financing terms, including those that may be dependent on price or retail rate escalation assumptions, should be made clear, easy to understand, and explained thoroughly.
- o Contracts should avoid underestimating costs and overestimating performance.
- o Ownership terms should be clearly defined.
- o Contracts should clearly describe the duration, nature, and potential impacts to the buyer of any restrictions, liens, fixture filings, or other security interests that may encumber the consumer's ability to transfer or modify his property or gain access to credit because of such terms.
- o Termination and removal terms should be clear especially in cases of third-party ownership.
- o Contracts should include discussion of who is responsible for the proper disposal of the product at the end of its life.
- o Performance calculations should specify and include all relevant factors.
- o If customer owned installation and/or equipment will be monitored, the consumer should be aware of the data being collected, who has ownership and access to the data, and if the data will be sold to others.
- o Contracts should include a reasonable period for rescinding the contract.
- o Contracts should include remediation terms regarding damage to property from work performed and who the responsible party is.
- o Contracts should include start and end dates if applicable.
- o Any performance labels should be clear and verifiable.
- o Contact information for follow up should be provided and updated, even if the company or product manufacturer ceases operations.
- o Explain who will provide and pay for system maintenance going forward. Any long-term maintenance plan should be made available in writing and fully explained.
- o An adequate dispute resolution process should be available in writing and explained.
- o The Federal Trade Commission's Cooling-Off Rule gives you a 3-day right to cancel a sale made at your home or workplace.